

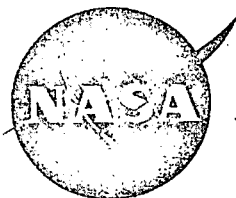
JUN 1 1972

2 (mix)

CIRCULATION COPY

JOHN F. KENNEDY SPACE CENTER
LIBRARY

PROCEDURE NO: FEC-CTC-5051
REVISION: ORIGINAL
DATE:



JOHN F. KENNEDY
SPACE CENTER

DRL 0132/010

CONTROL PROCEDURE

(NASA-TM-X-68615) HURRICANE PREPAREDNESS
AND CONTROL PLAN (NASA) May 1972 53 p
CSCL 04B

N72-32605

Unclas

G3/20 42041



HURRICANE PREPAREDNESS AND CONTROL PLAN

Reproduced by
**NATIONAL TECHNICAL
INFORMATION SERVICE**
U.S. Department of Commerce
Springfield VA 22151

PREPARED BY: FEDERAL ELECTRIC CORPORATION
COMMUNICATIONS DEPARTMENT

APPROVAL

FEC-CTC-5051

HURRICANE PREPAREDNESS
AND CONTROL PLAN

F-1
G-1
G-2
H-1
H-2
J-1
J-2
K-1

Original
Blank
Original
Blank
Original
Blank
Original
Blank
Original

E. H. Ramsey 5-16-72
MANAGER,
COMMUNICATIONS DEPARTMENT
CISS PROJECT

R. Q. Browne 5-17-72
CHIEF,
OIS AND TELECOMMUNICATIONS
DIVISION

LIST OF EFFECTIVE PAGES

FEC-CTC-5051

Total number of pages in this procedure
is 51 consisting of the following:

<u>Page Number</u>	<u>Issue</u>
Title	Original
A thru B	Original
i	Original
ii	Blank
1-1 thru 1-5	Original
1-6	Blank
2-1 thru 2-2	Original
3-1 thru 3-8	Original
A-1	Original
A-2	Blank
B-1 thru B-5	Original
B-6	Blank
C-1 thru C-7	Original
C-8	Blank
D-1 thru D-8	Original
E-1 thru E-5	Original
E-6	Blank
F-1	Original
F-2	Blank
G-1	Original
G-2	Blank
H-1	Original
H-2	Blank
J-1	Original
J-2	Blank
K-1 thru K-2	Original

TABLE OF CONTENTS

<u>SECTION</u>		<u>PAGE</u>
1	INTRODUCTION	
	1. Purpose.....	1-1
	2. Applicability.....	1-1
	3. General Situation.....	1-1
	4. Responsibilities.....	1-3
2	OPERATIONAL COMMUNICATIONS FACILITIES	
	1. Systems Turndown.....	2-1
	2. Systems/Equipment Requirements.....	2-1
3	CONTROL PROCEDURES	
	1. General Preparation Measures.....	3-1
	2. Branch Preparedness and Control Actions.....	3-3
<u>ANNEX</u>		
A	Hurricane Control Log - Status Notification List.....	A-1
B	Comm Control Hurricane Action Checklist.	B-1
C	Voice Systems Hurricane Action Checklist.....	C-1
D	Video Systems Hurricane Action Checklist.....	D-1
E	Support Services Hurricane Action Checklist.....	E-1
F	Depot Support Hurricane Action Checklist.....	F-1
G	Comm Office Bldg. Hurricane Action Checklist.....	G-1
H	System Support Hurricane Action Checklist.....	H-1
J	Hurricane Communications Diagram.....	J-1
K	Authorization for Procedure Deviation/ Revision.....	K-1

SECTION 1
INTRODUCTION

1 PURPOSE

THIS PLAN ESTABLISHES POLICY AND SETS FORTH GUIDANCE, RESPONSIBILITIES AND PROCEDURES UTILIZED BY FEDERAL ELECTRIC CORP., COMMUNICATIONS DEPARTMENT IN SUPPORT OF THE KSC EMERGENCY PREPAREDNESS PLAN, ANNEX A, HURRICANE CONTROL PLAN (GP-355) DATED 27 MAY 1971.

2 APPLICABILITY

THIS PLAN COVERS ALL FEC COMMUNICATIONS DEPARTMENT PERSONNEL, FACILITIES AND EQUIPMENT SITUATED AT THE KENNEDY SPACE CENTER THAT ARE THE RESPONSIBILITY OF FEC CONTRACT NAS 10-4967.

3 GENERAL SITUATION

- A. THE SIX-MONTH PERIOD FROM JUNE 1 TO NOVEMBER 30 IS CONSIDERED THE ATLANTIC HURRICANE SEASON. DURING THIS PERIOD, KSC AREAS ARE SUBJECT TO HIGH WINDS, HEAVY RAINS AND OTHER DESTRUCTIVE PHENOMENA GENERALLY ASSOCIATED WITH HURRICANES.
- B. HURRICANE PRECAUTIONS AT KSC ARE KEYED TO THE FORECAST TIME OF ARRIVAL OF THE STORM AND/OR THE PROBABILITY OF RECEIVING WINDS OF 50 KNOTS (57 MILES PER HOUR) OR GREATER. THE FOLLOWING HURRICANE ALERT CONDITIONS HAVE BEEN ESTABLISHED AND WILL BE USED AS A GUIDE IN REPORTING THE PROGRESS OF THE STORM AND IN EXECUTING HURRICANE PREPARATION TASKS AT KSC
- (1) CONDITION IV (STORM WARNING) - CONDITION IV IS SEVENTY-TWO HOURS PRIOR TO THE FORECAST ARRIVAL OF 50 KNOT OR

GREATER WINDS RELATED TO A TROPICAL CYCLONE. PERSONNEL ARE TO REPORT TO THEIR NORMAL ASSIGNED DUTIES, BUT REMAIN AVAILABLE FOR DUTIES IN CONNECTION WITH HURRICANE PREPARATIONS. CERTAIN INSTRUMENTATION SYSTEMS AND FACILITIES MAY BE SECURED AGAINST DAMAGE DEPENDENT UPON TEST SCHEDULES.

- (2) CONDITION III (HURRICANE ALERT) CONDITION III IS FORTY-EIGHT HOURS PRIOR TO THE FORECAST ARRIVAL OF 50 KNOT OR GREATER WINDS RELATED TO A TROPICAL CYCLONE. ALL PERSONNEL ARE TO BE AVAILABLE FOR HURRICANE SECURITY PREPARATIONS. MOST OF THE PREPARATORY WORK MUST BE INITIATED DURING THIS PERIOD. ALL LOOSE OBJECTS IN OR NEAR COMPLEXES, AND OTHER FACILITIES ARE SECURED AT THIS TIME. ALL NECESSARY EQUIPMENT AND SUPPLIES REQUIRED DURING THE STORM (SANDBAGS, TARPAULINS, PORTABLE PUMPS, AND GENERATORS, ETC.) ARE DRAWN. UNNECESSARY ANTENNAS ARE REMOVED FROM BUILDINGS. APOLLO-SATURN VEHICLES WHICH ARE ON A LAUNCH PAD WILL BE MOVED TO THE VAB UNDER AN OPERATIONAL PLAN (CTSP-5535) WHICH WILL BE INDEPENDENT OF ACTIONS REQUIRED IN THIS PLAN. CLOSE COORDINATION BETWEEN COMMUNICATIONS OPERATIONS ELEMENTS IS NECESSARY TO AVOID DUPLICATION OF EFFORT OR CONFLICTS IN SUPPORT ACTIVITIES.

- (3) CONDITION II (HURRICANE WARNING) CONDITION II IS TWENTY-FOUR HOURS PRIOR TO THE FORECAST ARRIVAL OF 50 KNOT OR GREATER WINDS RELATED TO A TROPICAL CYCLONE.

FINAL PREPARATIONS FOR HIGH WINDS AND WATER ARE TO BE COMPLETED. BUILDINGS ARE SHUTTERED AND SANDBAGGED. ALL MOTOR VEHICLES NOT REQUIRED FOR STORM PREPARATION ARE TURNED IN TO THE APPROPRIATE MOTOR POOL.

- (4) CONDITION I (FINAL HURRICANE WARNING) CONDITION I IS TWELVE HOURS PRIOR TO THE FORECAST ARRIVAL OF 50 KNOT OR GREATER WINDS RELATED TO A TROPICAL CYCLONE. ALL NORMAL DUTIES ARE CURTAILED FOR THE PROTECTION OF PERSONNEL AND PROPERTY. UPON RECEIPT OF AUTHORITY FROM THE PROJECT DIRECTOR, THE DEPARTMENT MANAGER WILL RELEASE ALL PERSONNEL NOT ASSIGNED TO DUTY AS "RIDE-OUT CREW".

- C. CENTER MANAGEMENT WILL FROM TIME TO TIME FIND IT NECESSARY TO PLACE THE CENTER IN A "MODIFIED" HURRICANE CONDITION WHEREIN SELECTED PRECAUTIONARY MEASURES WILL BE PERFORMED IN ADVANCE OF THE HURRICANE CONDITION FOR WHICH THE MEASURES ARE PRESCRIBED IN THIS PLAN. PERSONNEL CHARGED WITH EXECUTION OF THE PLAN MUST THEREFORE BE PREPARED TO PERFORM "OUT OF PHASE" TASKS WHEN DIRECTED.

4 RESPONSIBILITIES

THE MANAGER OF THE COMMUNICATIONS DEPARTMENT IS RESPONSIBLE FOR IMPLEMENTING THIS PROCEDURE. RESPONSIBILITIES ARE DELEGATED AS FOLLOWS

A. SYSTEMS SUPPORT BRANCH

THIS BRANCH IS RESPONSIBLE FOR THE DRAFTING, PUBLISHING AND PERIODIC UPDATE OF ALL HURRICANE PLANS AND PROCEDURES FOR THE COMMUNICATIONS DEPARTMENT, FEC. UPON NOTIFICATION

OF A HURRICANE CONDITION AT KSC, THE FEC COMMUNICATIONS CONTROL CONSOLE WILL ASSUME THE DUTIES OF HURRICANE CONTROL FOR THE COMMUNICATIONS DEPARTMENT AND WILL PERFORM ALL NOTIFICATION, STATUS AND COORDINATION REQUIREMENTS AS REFLECTED IN THIS DOCUMENT, THE KSC HURRICANE CONTROL PLAN, OR SPECIAL INSTRUCTIONS OF THE DEPARTMENT MANAGER,

B. OPERATIONAL BRANCHES

OPERATIONAL BRANCHES AS SPECIFIED IN SECTION 3 PARAGRAPH 2 WILL BE RESPONSIBLE FOR THE PERIODIC REVIEW OF THIS DOCUMENT AND WILL PROVIDE SYSTEM SUPPORT BRANCH WITH NECESSARY CORRECTIONS DUE TO PERSONNEL CHANGES OR FACILITIES RESPONSIBILITY. UPON NOTIFICATION THAT A HURRICANE CONDITION HAS BEEN ESTABLISHED OR CHANGED, IMMEDIATE ACTION WILL BE TAKEN TO PERFORM ALL TASKS ASSIGNED IN THIS DOCUMENT FOR THAT CONDITION, AND REPORT COMPLETED ACTIONS TO THE FEC COMMUNICATIONS CONTROL CONSOLE. BRANCHES HAVING "RIDE-OUT CREW" RESPONSIBILITIES WILL MAKE POSITION ASSIGNMENTS AS SOON AS POSSIBLE UPON NOTIFICATION OF CONDITION II, AND NOTIFY THE CONTROL CONSOLE (867-4141) OF THE NAMES AND POSITION ASSIGNMENT. DURING CONDITION III, PERSONNEL AS REQUIRED WILL BE RELIEVED OF THEIR NORMAL DUTIES AND MADE AVAILABLE FOR HURRICANE PREPARATION ASSIGNMENTS. DURING CONDITION II AND/OR I AND UPON RECEIPT OF AUTHORITY FROM THE PROJECT DIRECTOR, PERSONNEL NOT REQUIRED FOR "RIDE-OUT CREWS" WILL BE RELEASED.

C. RIDE-OUT PERSONNEL

BRANCHES WILL PROVIDE RIDE-OUT PERSONNEL TO BE LOCATED AT SPECIFIC BUILDINGS AS FOLLOWS

(1) M6-138 - COMMUNICATIONS DISTRIBUTION AND SWITCHING CENTER

SYSTEMS SUPPORT - TWO COMMUNICATIONS COORDINATORS IN ROOM 133

SUPPORT SERVICES - THREE OPERATORS (ONE SUPERVISOR) IN ROOM 116
TWO COMMUNICATIONS TECHNICIANS IN ROOM 122

(2) M6-399 - KSC HEADQUARTERS BUILDING

SUPPORT SERVICES - ONE COMMUNICATIONS TECHNICIAN IN ROOM 2110

SELECTED PERSONNEL BY POSITION OR CRAFT ARE REQUIRED TO PROVIDE FOR THE CONTINUING OPERATIONS IN THE ABOVE FACILITIES, TO CONDUCT HURRICANE OPERATIONS AND TO TAKE REMEDIAL ACTIONS IN THE EVENT OF COMMUNICATIONS FAILURE WITHIN THEIR REPAIR CAPABILITY. THE RIDE-OUT CREW WILL BE REQUIRED TO REMAIN ON KSC THROUGH CONDITION I UNTIL THE ALL CLEAR IS GIVEN OR UNTIL ANOTHER CONDITION IS ESTABLISHED. RIDE-OUT CREW PERSONNEL WILL BE ISSUED EMERGENCY BOXED RATIONS DURING THIS CONDITION. UPON NOTIFICATION OF "RIDE-OUT CREW" POSITION ASSIGNMENTS (PARA. 48) FEC COMMUNICATIONS CONTROL CONSOLE WILL MAKE NECESSARY ARRANGEMENTS WITH THE KSC HURRICANE CONTROL CENTER TO SECURE THE EMERGENCY RATIONS. COTS WILL BE PROVIDED FOR RIDE-OUT PERSONNEL; HOWEVER, EACH INDIVIDUAL WILL HAVE TO PROVIDE THEIR OWN PILLOWS, SHEETS AND BLANKETS.

SECTION 2

OPERATIONAL COMMUNICATIONS FACILITIES

1 SYSTEMS TURNDOWN

THE TURNDOWN OF OPERATIONAL COMMUNICATIONS FACILITIES WILL BE DEPENDENT ON OPERATIONAL REQUIREMENTS WHEN THE HURRICANE CONDITION IS ESTABLISHED. THE DIRECTOR OF LAUNCH OPERATIONS (CVTS) MAY DETERMINE THE REALTIME REQUIREMENTS FOR OPERATIONAL COMMUNICATIONS SYSTEMS/EQUIPMENT, AND AUTHORIZE THE TURNDOWN OF A SYSTEM OR EQUIPMENT IN CERTAIN AREAS WHEN AN OPERATIONAL REQUIREMENT NO LONGER EXISTS. THE APPLICABLE IN-OIS BRANCH CHIEF AND FEC SUPERVISOR WILL BE ADVISED BY COMMUNICATIONS CONTROL WHEN A SYSTEM OR EQUIPMENT IN SPECIFIED AREAS IS TO BE TURNED DOWN, IF THE AUTHORIZATION IS RECEIVED DIRECTLY FROM THE DLO TEST SUPERVISOR. IN THE EVENT IN-OIS IS NOTIFIED DIRECTLY BY THE APPROPRIATE AUTHORITY OR ELECTS TO TURN DOWN SYSTEMS IN CERTAIN AREAS WITHOUT DLO APPROVAL AND SO NOTIFIES THE APPLICABLE FEC SYSTEMS SUPERVISOR, THEN THE SUPERVISOR WILL BE RESPONSIBLE FOR NOTIFYING COMMUNICATIONS CONTROL. THIS NOTIFICATION IS NECESSARY TO ESTABLISH AND MAINTAIN A CENTRAL POINT OF INFORMATION AND SYSTEMS/EQUIPMENT STATUS AT ALL TIMES.

2 SYSTEMS/EQUIPMENT REQUIREMENTS

THE FOLLOWING COMMUNICATIONS CAPABILITIES ARE REQUIRED FOR THE DURATION OF THE HURRICANE WATCH IN SUPPORT OF THE HURRICANE CONTROL CENTER LOCATED IN ROOM 2110, KSC HEADQUARTERS BUILDING.

- A. ADMINISTRATIVE TELEPHONES
- B. POINT-TO-POINT TELEPHONES

- (1) 2BPC002 - AFETR COMMAND POST
- (2) 2BPM432 - BENDIX SCHEDULING
- (3) 2BPM047 - KSC, WEATHER OFFICE
- (4) 2BPC306 - CAPE COMMAND POST
- (5) 2BPM248 - IS/BCO HURRICANE COMMAND POST
- (6) 2BPM202 - FEC COMMUNICATIONS CONTROL

C. HF RADIO NETS

- (1) 101 - BATC BASE SUPPORT
- (2) 103 - SECURITY
- (3) 105 - SAFETY
- (4) 106 - GSA MOTOR POOL
- (5) 107 - COMMUNICATIONS
- (6) 108 - VIP/PIO NET (KSC DIRECTOR)

D. MISCELLANEOUS FACILITIES

- (1) NAWAS - HOT LINE, BREVARD CD HEADQUARTERS
- (2) 1069 TTY - TELETYPE TO PAFB WEATHER OFFICE
- (3) TV - CHANNEL 9 UNTIL CONDITION II OR ANTENNA REMOVAL
- (4) TV - ETR WEATHER RADAR

SECTION 3
CONTROL PROCEDURES

1 GENERAL PREPARATION MEASURES

GENERAL PREPARATION MEASURES ARE THE RESPONSIBILITY OF
INSTALLATION SUPPORT CONTRACTOR UNLESS OTHERWISE SPECIFIED.

A. BUILDINGS

- (1) ALL FIRST FLOOR WINDOWS AND GLASS DOORS WILL BE COVERED WITH PLYWOOD SHUTTERS. WITH FEW EXCEPTIONS, WINDOWS ABOVE THE FIRST FLOOR WILL BE CAULKED WHERE NEEDED BUT NEITHER SHUTTERED NOR TAPED.
- (2) EXTERNAL DOORS WILL BE SECURED. A 2 FOOT WIDE POLY-ETHYLENE SHEET WILL BE TAPED ACROSS THE BASE OF ALL 1ST FLOOR EXTERNAL DOORS, AND SANDBAGS WILL BE PLACED AT THE BASE OF THE DOORS, 2 BAGS HIGH.
- (3) STORM DRAINS AND OTHER APERTURES WHICH MIGHT ADMIT WATER FROM THE OUTSIDE SHOULD BE PLUGGED/COVERED.
- (4) AIR CONDITIONING/HEATING AND VENTILATION ELEMENTS WILL BE SECURED.
- (5) ELECTRICAL POWER WILL BE LEFT ON AND EMERGENCY BACK-UP POWER PROVIDED WHERE NECESSARY.
- (6) TARPAULINS MAY BE USED TO COVER LARGE MACHINERY INSTALLATIONS.
- (7) EQUIPMENT WITHIN THE BUILDINGS WHICH IS SUBJECT TO WATER DAMAGE SHOULD BE ELEVATED OFF THE FLOOR.

B. TRAILERS

- (1) ALL TRAILERS THAT ARE LEFT OUTSIDE WILL BE TIED DOWN.

- (2) ALL LOOSE WALKWAYS AND STAIRWAYS WILL BE TIED DOWN.
- (3) AIR CONDITIONING UNITS WILL BE COVERED.
- (4) WINDOWS AND DOORS OF OFFICE TRAILERS WILL NOT BE SHUTTERED, AND DOORS WILL NOT BE SANDBAGGED.
- (5) GLASS FRONT CABINETS SHOULD BE TAPED BY OCCUPANT.
- (6) POWER WILL BE TURNED OFF.

C. OUTSIDE AREAS

- (1) ALL OUTSIDE AREAS WILL BE POLICED FOR LOOSE MATERIALS.
- (2) SMALL ITEMS/EQUIPMENT THAT CAN BE MOVED WILL BE STORED INSIDE BUILDINGS.
- (3) THOSE ITEMS THAT CANNOT BE MOVED WILL BE TIED DOWN OR WEIGHTED DOWN.

D. GSA VEHICLES

- (1) STORAGE AREAS FOR GENERAL SERVICES ADMINISTRATION (GSA) VEHICLES DURING HURRICANE CONDITIONS HAVE BEEN DESIGNATED BY NASA. GSA EMPLOYEES WILL BE ON DUTY AT EACH STORAGE AREA TO ASSIST IN PARKING AND TO ARRANGE RETURN TRANSPORTATION FOR PERSONNEL DELIVERING THE VEHICLES.

(A) UPON NOTIFICATION OF HURRICANE CONDITION III,

ALL GSA VEHICLES NOT REQUIRED FOR HURRICANE PREPARATIONS OR SUPPORT WILL BE DELIVERED TO THE MAIN MOTOR POOL LOCATED AT THE CORNER OF 3RD AVENUE AND "B" STREET, KENNEDY SPACE CENTER, (KSC).

(B) IMMEDIATELY UPON NOTIFICATION OF HURRICANE CONDITION II, ALL GSA VEHICLES NOT PREVIOUSLY PARKED AT THE MAIN MOTOR POOL AND NOT REQUIRED

FOR HURRICANE PREPARATION WILL BE DELIVERED TO
THE FOLLOWING STORAGE AREAS;

VEHICLE FROM	HURRICANE STORAGE AREA
KSC HEADQUARTERS BUILDING & VICINITY	PARKING LOT AT REAR OF KSC HDQTRS, BLDG; FOLLOW ATTENDANT'S DIRECTIONS.
VAB, LCC, LC39A & B	PARKING LOT IN FRONT OF THE PRESS SITE
OTHER KSC AREAS	MAIN MOTOR POOL, 3RD AVENUE AND "B" STREET, KSC,
CAPE KENNEDY AFS	AREA 42 (HANGERS D & R) NORTH OF GSA BODY SHOP

(2) ALL GSA VEHICLES ARE TO BE PARKED WITH WINDOWS CLOSED,
AIR VENT OPEN, LIGHTS OFF, AUTOMATIC TRANSMISSIONS PLACED
IN "PARK", MANUAL TRANSMISSIONS PLACED IN LOWEST FORWARD
SPEED GEAR, EMERGENCY BRAKES APPLIED AND IGNITION KEYS
LEFT IN THE SWITCH.

(3) AFTER VEHICLES ARE RELOCATED DURING CONDITION II, THEY
WILL NOT BE REMOVED FROM RELOCATION SIDE UNTIL THE ALL
CLEAR EXCEPT FOR SHUTTLE SERVICE AND EMERGENCY REQUIRE-
MENT.

(3) (4) SHOULD A REQUIREMENT EXIST TO RELOCATE ALL VEHICLES IN
ORDER TO PROVIDE ADDITIONAL PROTECTION FROM ANTICIPATED
FLOODING, ADDITIONAL DRIVERS MAY BE REQUIRED, IN SUCH
CASES, A CALL WILL GO OUT OVER THE PUBLIC ADDRESS SYSTEM
FOR PERSONNEL TO ASSIST; TRANSPORTATION WILL BE PROVIDED
TO AND FROM THE PARKING AREA.

2 BRANCH PREPAREDNESS AND CONTROL ACTIONS

FEC COMMUNICATIONS BRANCHES WILL BE RESPONSIBLE FOR ACCOMPLISHING

PREPAREDNESS STEPS AS LISTED BELOW UPON OFFICIAL NOTIFICATION
FROM APPROPRIATE AUTHORITY

A. SYSTEMS SUPPORT BRANCH

- (1) UPON NOTIFICATION OF A HURRICANE ALERT CONDITION CHANGE OR ANY OTHER SPECIAL INSTRUCTIONS FROM THE FEO HURRICANE CONTROL OFFICER, MR. J. CHENEY, TELEPHONE NUMBER 867-7334, (OR KSC HURRICANE CONTROL CENTER AFTER INITIAL NOTIFICATION), A STATUS NOTIFICATION LIST (SEE APPENDIX A) WILL BE ANNOTATED WITH THE APPLICABLE INFORMATION AND TIMES; EACH MANAGER ON THE LIST WILL THEN BE CALLED AND INFORMED OF THE STATUS OR INSTRUCTIONS. IF THE MANAGER OR THE ALTERNATE CANNOT BE CONTACTED, THE APPLICABLE HURRICANE REPRESENTATIVE FOR THE AREA WILL BE PASSED THE INFORMATION.
- (2) PERFORM TASKS AND DUTIES AS IDENTIFIED ON SYSTEMS SUPPORT HURRICANE ACTION CHECKLIST FOR TEST SUPPORT (ANNEX H) AS REQUIRED BY APPLICABLE HURRICANE CONDITION.
- (3) ANNOTATE COMPLETION OF LINE ITEMS BY ACTION SECTIONS ON ANNEX B. HURRICANE CONTROL WILL BE NOTIFIED WHEN ALL LINE ITEMS ARE COMPLETED FOR A SPECIFIC KSC CONTROL DATA SHEET NUMBER.
- (4) SELECT COMMUNICATIONS COORDINATORS FOR RIDE-OUT CREW ASSIGNMENT PER PARAGRAPH 4C, SECTION 1.
- (5) SUPPORT TRANSFER OF SPACE VEHICLE/MSS FROM PAP TO VAB/ MSS PARKSITE IN ACCORDANCE WITH CTSP-5535 IF IMPLEMENTED.

B. VOICE SYSTEMS BRANCH

UPON NOTIFICATION OF ESTABLISHMENT OF A HURRICANE CONDITION,
THE FOLLOWING ACTIONS WILL BE TAKEN AND COMPLETED ACTION
REPORTED TO FEC COMMUNICATIONS CONTROL,

(1) COMPLEX 39

(A) PERFORM TASKS AND DUTIES AS IDENTIFIED ON VOICE
SYSTEMS HURRICANE ACTION CHECKLIST FOR COMPLEX 39
OPERATIONS AREA, (ANNEX C-1),

(B) SUPPORT TRANSFER OF SPACE VEHICLE/MSS FROM PAD TO
VAB/MSS PARKSITE IN ACCORDANCE WITH CTSP-5535 IF
IMPLEMENTED,

(2) O&C BUILDING

PERFORM TASKS AND DUTIES AS IDENTIFIED ON VOICE
SYSTEMS HURRICANE ACTION CHECKLIST FOR O&C BUILDING,
(ANNEX C-2).

(3) AUDIO SUPPORT GROUP

PERFORM TASKS AND DUTIES AS IDENTIFIED ON VOICE
SYSTEMS HURRICANE ACTION CHECKLIST FOR AUDIO SUPPORT,
(ANNEX C-3).

(4) TECHNICAL CONTROL GROUP

PERFORM TASKS AND DUTIES AS IDENTIFIED ON VOICE
SYSTEMS HURRICANE ACTION CHECKLIST FOR TECHNICAL
CONTROL, (ANNEX C-4).

C. VIDEO SYSTEMS BRANCH

UPON NOTIFICATION OF ESTABLISHMENT OF A HURRICANE CONDITION,
THE FOLLOWING ACTIONS WILL BE TAKEN AND COMPLETED ACTION
REPORTED TO FEC COMMUNICATIONS CONTROL

(1) COMPLEX 39 OPERATIONS GROUP

(A) PERFORM TASKS AND DUTIES AS IDENTIFIED ON VIDEO SYSTEMS HURRICANE ACTION CHECKLIST FOR COMPLEX 39 OPERATIONS AREA, (ANNEX D-1).

(B) SUPPORT TRANSFER OF SPACE VEHICLE/MSS FROM PAD TO TO VAB/MSS PARKSITE IN ACCORDANCE WITH CTSR-5535 IF IMPLEMENTED.

(2) CD&SC OPERATIONS GROUP

PERFORM TASKS AND DUTIES AS IDENTIFIED ON VIDEO SYSTEMS HURRICANE ACTION CHECKLIST FOR CD&SC OPERATIONS; (ANNEX D-2).

(3) INDUSTRIAL AREA OPERATIONS GROUP

PERFORM TASKS AND DUTIES AS IDENTIFIED ON VIDEO SYSTEMS HURRICANE ACTION CHECKLIST FOR THE INDUSTRIAL AREA OPERATIONS, (ANNEX D-3).

(4) OPERATIONS SUPPORT GROUP

PERFORM TASKS AND DUTIES AS IDENTIFIED ON VIDEO SYSTEMS HURRICANE ACTION CHECKLIST FOR THE OPERATIONS SUPPORT GROUP, (ANNEX D-4).

D. SUPPORT SERVICES BRANCH

UPON NOTIFICATION OF ESTABLISHMENT OF HURRICANE CONDITION IV, THE JWTC CONSOLE WILL BE MANNED AND WILL SERVE AS THE SUPPORT SERVICES BRANCH POINT OF CONTACT FOR HURRICANE PREPAREDNESS ACTIONS. THE FOLLOWING ACTIONS WILL BE TAKEN AND COMPLETED ACTION REPORTED THRU JWTC TO FEC COMMUNICATIONS CONTROL

(1) COMMUNICATIONS SERVICES SECTION

(A) PERFORM TASKS AND DUTIES AS IDENTIFIED ON SUPPORT

SERVICES HURRICANE ACTION CHECKLIST FOR COMMUNICATIONS SERVICES, (ANNEX E-1),

- (B) SELECT PERSONNEL TO MAN KSC SWITCHBOARD FOR RIDE-OUT CREW ASSIGNMENT PER PARAGRAPH 4C, SECTION 1,

(2) CABLE ENGINEERING AND MAINTENANCE SECTION

- (A) PERFORM TASKS AND DUTIES AS IDENTIFIED ON SUPPORT SERVICES HURRICANE ACTION CHECKLIST FOR CABLE ENGINEERING AND MAINTENANCE, (ANNEX E-2),

- (B) SUPPORT TRANSFER OF SPACE VEHICLE/MSS FROM PAD TO VAB/MSS PARKSITE IN ACCORDANCE WITH CTSP-5535 IF IMPLEMENTED,

(3) TELECOMMUNICATIONS SECTION

- (A) PERFORM TASKS AND DUTIES AS IDENTIFIED ON SUPPORT SERVICES HURRICANE ACTION CHECKLIST FOR TELECOMMUNICATIONS, (ANNEX E-3),

- (B) SUPPORT TRANSFER OF SPACE VEHICLE/MSS FROM PAD TO VAB/MSS PARKSITE IN ACCORDANCE WITH CTSP-5535 IF IMPLEMENTED,

- (C) SELECT PERSONNEL TO MAN SYSTEM TEST FACILITY AND HEADQUARTERS FOR RIDE-OUT CREW ASSIGNMENT PER PARAGRAPH 4C, SECTION 1,

E. DEPOT SUPPORT BRANCH

UPON NOTIFICATION OF ESTABLISHMENT OF A HURRICANE CONDITION, PERFORM TASKS AND DUTIES IDENTIFIED ON THE DEPOT SUPPORT HURRICANE ACTION CHECKLIST, (ANNEX F), AND COMPLETION REPORTED TO KSC COMMUNICATIONS CONTROL,

F. COMMUNICATIONS OFFICE BUILDING

UPON NOTIFICATION OF ESTABLISHMENT OF A HURRICANE CONDITION,
PERFORM TASKS AND DUTIES IDENTIFIED ON THE COMMUNICATIONS
OFFICE BUILDING HURRICANE ACTION CHECKLIST (ANNEX G); AND
REPORT COMPLETION TO FEC COMMUNICATIONS CONTROL.

NASA KSC 5/72

KSC COMMUNICATIONS CONTROL LOG			DATE		PAGE <u>1</u> of <u>1</u>	
Hurricane		HURRICANE CONTROL LOG - STATUS NOTIFICATION LIST				
Condition		Time effective		Time received		
BRANCH	MANAGER/ALTERNATE	BR. HURRICANE RESP	TELEPHONE NUMBER	TIME NOTIFIED	INITIALS	
Manager	E. J. Rainwater		867-2288/723/3387			
		C. M. Toon	867-2166/783-0450			
Voice Sys	D. S. Boessow R. A. Sharpe		867-6894/452-3555 867-4729/452-3840			
VS-O&C		A. L. Proctor	867-2020/254-5126			
VS-Cx 39		G. S. Bell	867-6060/773-1215			
Video Sys	R. H. Tveter		867-8686/267-5188			
VD-CD&SC		F. DeBernardo W. R. Johnson	867-2275/632-4818 867-2275/254-1337			
VD-O&C		B. W. Hale	867-2020/452-2404			
VD-Cx 39		D. D. Roth	867-6060/452-0703			
Depot Spt	R. L. Mears		867-5875/723-4568			
Comm Maint		C. W. Schafer	867-2272/254-5358			
Supply		O. Knight	867-5708/773-2106			
Sup. Ser.	D. S. Martin		867-2230/723-0622			
	D. L. Brown		867-2253/267-3780			
		B. C. Wilson	867-2257/267-9253			
Telcom		R. L. Purrell	867-2250/452-1669			
Cable		G. D. Kennedy	867-2290/783-3893			
		D. R. Lusk	867-2291/452-3837			
Comm Ser		D. L. Prown	867-2253/267-3780			
Sys Spt.	W. W. Deeter		867-2200/452-6660			
Test Spt	T. M. Sayre		867-2200/269-1534			

COMMUNICATIONS CONTROL HURRICANE ACTION CHECKLIST

CTC-5051

ANNEX B

Page 1

HURRICANE

Line Item	System	Bldg./No.	KSC Control Data Sheet#	Condition				Completion By		Notified Hurricane Control		Init.
				4	3	2	1	Name	Time	Name	Time	
C-1-1	Voice	Pad A	1-53		X	X						
D-1-3, 4 5, 6, 7, 8 9, 10, 13 & 14	Video	(All Areas)		X								
D-1-11	Video					X						
E-2-2	Spt. Svcs.			X								
C-1-2	Voice	Pad B	1-30	X	X	X						
D-1-27	Video	(All Areas)		X								
E-2-3	Spt. Svcs.											
C-1-3	Voice	MSS	1-94	X								
C-1-4	Voice			X								
D-1-16, 17, 18, & 19	Video			X								
D-1-20	Video											
E-2-7	Spt. Svcs.			X								
C-1-5	Voice	VAB	1-120									
D-1-23	Video			X								
D-1-24	Video											
C-1-6	Voice	CCF K7-468	1-191 (No tasks)			X						
D-1-25	Video											
C-1-7	Voice	LCC K6-900	1-128 (No tasks)	X								
C-1-8												
C-1-9												
C-1-10												
D-1-26	Video											
C-1-11	Voice	CT 1 & 2	1-108									

COMMUNICATIONS CONTROL HURRICANE ACTION CHECKLIST

CTC-5051
ANNEX B
Page 2

HURRICANE

Line Item	System	Bldg./No.	KSC Control Data Sheet#	Condition				Completion By		Notified Hurricane Control	
				4	3	2	1	Name	Time	Name	Time
C-2-1	Voice	O&C	2-4	X		X					
C-2-2	Voice	M7-355				X					
D-3-3	Video					X					
C-2-3	Voice	Timber Tr R M7-863	2-18	X							
C-2-4	Voice	Rdr Rst Cntl Pldg M7-867	2-22	X							
C-2-5						X					
C-2-6	Voice	Env Sys Pldg.	2-25			X					
C-2-7	Voice	S/C Sys Snt	2-33	X							
C-2-8	Voice	#1 M7-1212				X					
D-3-5	Video	#2 M7-1210				X					
C-2-9	Voice	Cryo Test	2-37	X							
C-2-10	Voice	1	(Dupe)			X					
D-3-4	Video	M7-1412				X					
C-2-11	Voice	Cryo Test	2-37	X							
C-2-12	Voice	2	(Dupe)			X					
D-3-4	Video	M7-1410				X					
C-2-13	Voice	Pyro Instal Pldg.	2-43			X					
		M7-1469									
C-2-14	Voice	CIF	3-15	X							
C-2-15	Voice	M6-342				X					
D-3-7	Video					X					
C-2-16	Voice	CIF Ant	3-84	X							
C-2-17		Pldg.									
D-3-8		L7-1557				X					

COMMUNICATIONS CONTROL HURRICANE ACTION CHECKLIST

CTC-5051

ANNEX B

Page 3

HURRICANE

Line Item	System	Bldg./No.	KSC Control Data Sheet#	Condition				Completion By		Notified Hurricane Control		Init.
				4	3	2	1	Name	Time	Name	Time	
C-2-18	Voice	Fire Tng Area L7-888	(No tasks)		X							
C-3-1	Voice	Press Site K7-1205	1-137		X							
C-3-2	Voice		(No tasks)			X						
D-2-9	Video					X						
C-4-2	Voice	So. Peptr. N6-1118	3-108			X						
D-2-11	Video					X						
D-2-1	Video	CD&SC M6-138	3-9		X							
D-2-2	Video				X							
E-1-1	Support				X							
E-1-2	Support				X							
E-1-5	Support	KSC Hrs.	3-22			X						
D-2-12	Video	Te1 IV N6-2296	3-110			X						
D-2-13	Video	NASA News Center M7-657	3-124		X							
D-1-12	Video	LUT 1, 2 & 3	1-73 (No tasks)			X						
D-1-21	Video	DLTR's 1 thru 6	1-66		X							
D-1-22	Video		1-67			X						
D-2-7	Video	VAPP K6-1193	1-145			X						
D-2-8	Video	PRRS M7-531	2-64		X							

COMMUNICATIONS CONTROL HURRICANE ACTION CHECKLIST

CTC-5051
ANNEX B
Page 4

HURRICANE _____

Line Item	System	Bldg./No.	KSC Control Data Sheet#	Condition				Completion By		Notified Hurricane Control		Init.
				4	3	2	1	Name	Time	Name	Time	
D-2-10	Video	A&T Fal, M7-351		X								
E-2-4	Support	UCS Sites	1-196 1-217 3-101		X							
E-2-5	Support	Weather Towers	1-197 1-218 1-227 3-80		X	X	X					
E-2-6	Support	Tel Flsse Sites	1-196 1-236 3-82		X	X	X					
E-2-10 F-2-11	Support	Telcom Trailers	3-72		X							
E-3-1 E-3-6	Support	Telcom Office Bldg.	3-36		X							
F-1	Maint & Sply.	Radio Net 108	3-57		X							
F-2		Dr. Nehus Radio	3-57		X							
F-3			3-57		X							
F-4			3-57		X							
F-7			3-57									
G-1	COP Admin	MF-339	3-13		X							

COMMUNICATIONS CONTROL HURRICANE ACTION CHECKLIST

CTC-5051

ANNEX B

Page 5

HURRICANE

Line Item	System	Bldg./No.	KSC Control Data Sheet#	Condition				Completion By		Notified Hurricane Control		Init.
				4	3	2	1	Name	Time	Name	Time	
H-8	Rideout Crew	M6-339 and M6-399 Rm 2110	Sect XIII para E page 27			X						
D-3-6	Video	FCT B M7-409	2-57			X						
C-1-12	Voice Systems	Vehicle (Turn In)				X						
C-2-19						X						
C-3-4						X						
C-4-1						X						
D-1-1	Video Systems	Vehicle (Turn In)	(A2A Vans) (Color Vans)			X						
D-2-3						X						
D-2-4						X						
D-2-5						X						
D-3-1						X						
D-4-1						X						
D-4-2						X						
E-1-3	Support Svcs	Vehicle (Turn In)				X						
E-1-4												
E-2-8												
E-2-9												
E-2-12												
E-2-13												
E-3-2												
E-3-3												
F-5	Depot Support	Vehicle (Turn In)				X						
F-6												
G-2	COR	Vehicle (Turn In)				X						
H-6	System Spt.	Vehicle (Turn In)				X						

VOICE SYSTEMS HURRICANE ACTION CHECKLIST

CTC-5051

ANNEX C-1

Page 1

GROUP Complex 39

HURRICANE

Line Item	Facility/ Equipment	Bldg./No.	Action Required	Condition				Completion Name/Time	Notified Comm Control Name/Time
				4	3	2	1		
C-1-1	Pad A (All areas)	J8-1708	<ol style="list-style-type: none"> 1. Walk down all exposed areas and verify that all RF-OIS units and cables are secure and headset caps in place. 2. Verify that all PF-OIS DR Boxes are secure and cables tied down. 3. Verify that material stored in Trailer 1-165 is properly stored to prevent damage. Remove PF-OIS and PC Boards and test equipment from trailer and store in Room 204, PTCR. 4. Verify Bendix has removed Egress Radio Antenna from west side of Lut Interface Tower, and antenna is stored in Room 1E2, VAR. 5. Remove the 4 Egress Radio antennas from Slide Wire Punter and store in Room 1E2, VAR. 6. Remove all Portable/mobile RF-OIS units and stands, and store in Room 1F1, VAR. 7. Turn down PF-OIS system and disconnect battery plant. 	X					
C-1-2	Pad B (All areas)	J7-337	<ol style="list-style-type: none"> 1. Walk down all exposed areas and verify that all PF-OIS units and cables are secure and headset caps are in place. 2. Verify that all PF-OIS PB Boxes are secure and cables tied down. 3. Remove all Portable/mobile RF-OIS units and stands, and store in Room 1F1, VAR. 4. Turn down PF-OIS system and disconnect battery plant. 	X					
C-1-3	Mobile Service Structure	K7-187	<ol style="list-style-type: none"> 1. Walk down structure and verify that all RF-OIS units are properly capped and cables are secure. Verify PP's are secured. 						
C-1-4	MSS	K7-187	<ol style="list-style-type: none"> 1. Turn down PF-OIS system and disconnect battery plant. 						

C-1

VOICE SYSTEMS HURRICANE ACTION CHECKLIST

CTC-5051

ANNEX C-1

Page 2

GROUP Complex 39

HURRICANE

Line Item	Facility/ Equipment	Bldg./No.	Action Required	Condition				Completion Name/Time	Notified Comm Control Name/Time
				4	3	2	1		
C-1-5	VAR	K6-848	Remove RF-OIS units on VAP roof and secure in Penthouse. Tape and secure tap cables in place.	X					
C-1-6	CCF	K7-468	Turn down RF-OIS and SIS systems and disconnect battery plants.			X			
C-1-7	LCC	K6-900	Remove RF-OIS unit from LCC roof and store in room 1P13. Tape and secure tap cable in place.	X					
C-1-8	LCC 1P1	K6-900	Power down all Chargers and disconnect battery plants for the SIS system.			X			
C-1-9	LCC 1P1	K6-900	Power down 48 volt plant for Carrier system and Bridges in room 1P3, and disconnect battery.			X			
C-1-10	LCC 1P1	K6-900	Power down all RF-OIS Chargers in the VAP & LCC and disconnect batteries.			X			
C-1-11	Crawler 1 & 2 CT Parksite		Disconnect Charger and batteries for CTIS system on CT 1 and CT 2.			X			
C-1-12	KCC 1P1	K6-900	Verify all vehicles have been turned in per para 1 d, Section 3.			X			

C-2

VOICE SYSTEMS' HURRICANE ACTION CHECKLIST

CTC-5051

ANNEX C-2

Page 1

GROUP Industrial Area

HURRICANE

Line Item	Facility/ Equipment	Bldg./No.	Action Required	Condition				Completion Name/Time	Notified Comm Control Name/Time
				4	3	2	1		
C-2-1	O&C Building	M7-355	Check PF-OIS units on O&C Roof, and on ground level on South and East side of building to assure dust caps are in place and units secure.		X				
C-2-2	O&C Building	M7-355	1. Secure RF-OIS System in Rooms 4266, 3222 and 2270. Verify battery plants are disconnected. 2. Secure 48 volt Plant in Rooms 2270 and 3222. Verify batteries are disconnected. 3. Secure O&C Astro Comm System.			X			
C-2-3	Radar Boresite Range Tower	M7-863	Secure caps and verify OIS-A units are secure.		X				
C-2-4	Radar Boresite Range Control Building	M7-867	Secure caps and verify OIS-A units are secure.		X				
C-2-5	Radar Boresite Range Control Building	M7-867	Secure 28 volt power supply for OIS-A system.			X			
C-2-6	Environmental Systems Bldg.	M7-961	Secure 28 volt power supply for OIS-A system.			X			
C-2-7	Spacecraft Systems Support Bldg #1	M7-1212	Secure caps and verify OIS-A units are secure.		X				
C-2-8	Spacecraft Systems Support Bldg #1	M7-1212	Secure 28 volt power supply for OIS-A system and disconnect batteries.			X			
C-2-9	Cryo Test Bldg #1	M7-1412	Secure caps and verify OIS-A units are secure around Cryo 1 and at Pad, M7-1461.		X				

HURRICANE ACTION CHECKLIST

VOICE SYSTEMS

GROUP Industrial Area

HURRICANE

Line Item	Facility/ Equipment	Bldg./No.	Action Required	Condition				Completion Name/Time	Notified Comm Control Name/Time
				4	3	2	1		
C-2-10	Cryo Test Bldg #1	M7-1412	Secure 28 volt power supply for OIS-A system and disconnect batteries.			X			
C-2-11	Cryo Test Bldg #2	M7-1410	Secure cans and verify OIS-A units are secure around Crvo 2 and at Pad, M7-1460.		X				
C-2-12	Cryo Test Bldg #2	M7-1410	Secure 28 volt power supply for OIS-A system and disconnect batteries.			X			
C-2-13	Pyrotechnic Installations Building	M7-1469	Secure 28 volt power supply for OIS-A system.			X			
C-2-14	Central Instrumentation Facility	M6-342	Secure cans and verify that OIS-A units on CIF Roof are secure and cables properly tied down.		X				
C-2-15	Central Instrumentation Facility	M6-342	1. Power down 28 volt power supplies for OIS-A system in Room 249A and verify that battery plant is disconnected. 2. Power down 48 volt Point-to-Point plant in Room 161 and verify that battery plant is disconnected.			X			
C-2-16	CIF Antenna Field Site	L7-1557	Secure caps and verify that OIS-A units on roof are secure and cables are properly tied down.		X				
C-2-17	CIF Antenna Field Site	L7-1557	Power down 28 volt power supply for OIS-A system and verify that battery plant is disconnected.			X			
C-2-18	Fire Tng Area	L7-888	1. Secure caps and verify that OIS-A units at site are properly secured and cables tied down 2. Remove PA system mike and store in Room 4266, N&C Building. 3. Remove OIS-A headset extension cables and store in Room 2222, N&C Building. 4. Lock power for OIS-A system in the "OFF" position and secure all bolts on cabinet door.		X				

GROUP Industrial Area

HURRICANE

Line Item	Facility/ Equipment	Bldg./No.	Action Required	Condition				Completion Name/Time	Notified Comm Control Name/Time
				4	3	2	1		
C-2-19	Vehicle		Turn vehicle into the Headquarters Hurricane Parking Lot when all preparations are completed, per paragraph 1 d, Section 3.			X			

GROUP Audio Support Group

HURRICANE

Line Item	Facility/ Equipment	Bldg./No.	Action Required	Condition				Completion Name/Time	Notified Comm Control Name/Time
				4	3	2	1		
C-3-1	Broadcast Van	Press Site K7-1205	Check area and secure any FEC controlled property. Power down all facilities when no longer required by PAO and secure area.		X				
C-3-2	Broadcast Van	K7-1205	Verify that Roening has taken required action to secure Broadcast Van at the Press Site.			X			
C-3-3	Vehicles	M6-138	Verify all vehicles not required for hurricane preparations are turned into the storage area.		X				
C-3-4	Vehicles	M6-138	Verify all vehicles used for hurricane preps are turned into the storage area.			X			

VOICE SYSTEMS HURRICANE ACTION CHECKLIST

CTC-5051

ANNEX C-4

Page 1

GROUP Technical Control

HURRICANE

Line Item	Facility/ Equipment	Bldg./No.	Action Required	Condition				Completion Name/Time	Notified Comm Control Name/Time
				4	3	2	1		
C-4-1	CD&SC	M6-138	Verify vehicle turned into storage area per para 11d, Section 3.			X			
C-4-2	South Repeater	M6-1118	Power down 48 volt Plant and disconnect batteries.			X			

Video SYSTEMS HURRICANE ACTION CHECKLIST

CTC-5051

ANREX D-1

Page 1

GROUP LC-39 Operations

HURRICANE

Line Item	Facility/ Equipment	Bldg./No.	Action Required	Condition				Completion Name/Time	Notified Comm Control Name/Time
				4	3	2	1		
D-1-1	Vehicles	K6-900	Turn in all vehicles not required in support of hurricane preparation activities.		X				
D-1-2	Video	K6-900	Coordination will be effected thru the communications control console (7-4141) for providing necessary communications support, and powering down of video systems not required for NASA operational activities.		X				
D-1-3	Pad A (Pad Surface)	J6-1708	Survey and make preparations for removal of 6 light housings and 2 camera housings.	X					
D-1-4	Pad A (Pad Surface)	J6-1708	Coordinate with Poeing for the removal of 2 camera housings and 6 light housings from Pad Surface ***Contact N. D. Roth, 867-6060 for coordination prior to removal***		X				
D-1-5	Pad A (Pad Surface)	J6-1708	Remove camera 037 and camera 039 lights and cameras from housings and store in Room 204, PTCR with cables. ***Removal of cameras 037 and 039 must be accomplished a minimum of 5 hours prior to crawler transporter moving under ML***		X				
D-1-6	Pad A (Pad Surface)	J6-1708	If installed, remove camera 037A with cables and store in DLTR 4, J8-2204.		X				
D-1-7	Pad A (SW Pad Surface)	J6-1708	If installed, assemble 4 light pedestals on SW Pad surface, tie together and sandbag with 40 sandbags.		X				
D-1-8	Pad A (SE Pad Surface)	J6-1708	If installed, assemble 3 light pedestals on SE Pad surface, tie together and sandbag with 30 sandbags.		X				
D-1-9	Pad A (East Infield) UDMH-N2H4 Trl. Area	J6-1708	If installed, remove 4 light pedestals and cables and store in 4 DLTRs.		X				

D-1

D-1

Video SYSTEMS HURRICANE ACTION CHECKLIST

CTC-5051

ANNEX D-1

Page 2

GROUP LC-39 Operations

HURRICANE

Line Item	Facility/ Equipment	Bldg./No.	Action Required	Condition				Completion Name/Time	Notified Comm Control Name/Time
				4	3	2	1		
D-1-10	Pad A (West Infield) Oxidizer Vapor Area	J6-1708	If installed, remove 4 light pedestals and cables and store in 4 DLTRS.		X				
D-1-11	PTCR-A Rooms 203 & 204	J6-1708	With concurrence of IN-OIS-2, turn power off to all electronic equipment						
D-1-12	LUT 1, 2 & 3		***Note, if LUT is in VAD no FEC hurricane protective measures are necessary*** 1. Coordinate removal of three camera mounts from the zero level of the LUT with Pendix. 2. Remove three camera mounts from the zero level of LUT. 3. Remove camera 11 from 60' level and secure camera hardware to the handrail with 1/2" rope. ***Note, contact D. D. Roth 867-6060 for coordina- tion prior to removal*** ***Note, camera mounts must be removed a minimum of five hours prior to roll back*** 1. At camera pad 2 secure loose cables and tie in place. 2. At camera pad 5 secure loose cables and tie in place. 1. Survey and make preparations to remove all OTV equipment from trailer. 2. Remove all OTV equipment from trailer and store equipment in DLTR 3 Building K7-89, on shelves.	X					
D-1-13	Pad A UNIV Camera Pads 2 and 5	J8-1714 J8-1703				X			
D-1-14	Trailer 1-233 Video Systems Maint Trailer (Pad A)	Pad A Trailer Park					X		

HURRICANE ACTION CHECKLIST

CTC-5051

ANNEX D-1

Page 3

Video Systems

GROUP LC-39 Operations

HURRICANE

Line Item	Facility/ Equipment	Bldg./No.	Action Required	Condition				Completion Name/Time	Notified Comm Control Name/Time
				4	3	2	1		
D-1-15	MSS		Coordinate delivery of 50' of 1/2" rope to NASA Comm Room 0 level.	X					
D-1-16	MSS		Minus 22' level NE side; camera 046 move to girder and tie down.		X				
D-1-17	MSS		Minus 22' level NW side; camera 047 move to girder and tie down.		X				
D-1-18	MSS		6 level west side; camera 058 tie camera to hand rail and light post.		X				
D-1-19	MSS		6 level west side; camera 059 tie camera to hand rail and light post.		X				
D-1-20	MSS		***If condition 3 occurs during hypergolic loading, camera 058 and 059 will be located on the 3A level, move cameras and tie to structure as necessary*** With concurrence of IN-OIS-2, turn power off to all electronic equipment.				X		
D-1-21	Repeater Bldgs DLTR 1,2,3,4,5 & 6	K7-709 K7-422 K7-89 K8-2204 J7-1736 J7-986	1. Secure equipment in building where damage may result from wind driven rain. 2. Cover all equipment liable to water damage with plastic sheeting and tape securely.		X				
P-1-22	DLTR's 1 thru 6	K7-709 K7-422 K7-89 K8-2204 J7-1736 J7-986	With concurrence of IN-OIS-2, turn power off to all electronic equipment.				X		

D-3

Video Systems HURRICANE ACTION CHECKLIST

CTC-5051

ANNEX D-1

Page 4

GROUP LC-39 Operations

HURRICANE

Line Item	Facility/ Equipment	Bldg./No.	Action Required	Condition				Completion Name/Time	Notified Comm Control Name/Time
				4	3	2	1		
D-1-23	VAR High Bay Roof	K6-848	Remove VAP roof camera and cable, and store in the VAP roof penthouse.	X					
D-1-24	VAP, Rooms 2E1 3F1, 3A7	K6-848	With concurrence of IN-OIS-2, turn power off to all electronic equipment.			X			
D-1-25	Converter Compressor Facility	K7-468	With concurrence of IN-OIS-2, turn power off to all electronic equipment.			X			
D-1-26	LCC, Rooms 1P2 & 1P3	K6-900	With concurrence of IN-OIS-2, turn power off to all electronic equipment.			X			
D-1-27	Pad B		Action required will be determined by supervisor, LC-39 operations dependent upon extent of Pad activation at time of hurricane/disaster occurrence				X		
D-1-28	LC-39	K6-900	Personnel will be released from duty upon authorization from supervision.						

Video Systems HURRICANE ACTION CHECKLIST

CTC-5051

ANNEX D-2

Page 1

GROUP CD&SC Operations

HURRICANE

Line Item	Facility/ Equipment	Bldg./No.	Action Required	Condition				Completion Name/Time	Notified Comm Control Name/Time
				4	3	2	1		
D-2-1	CDSC	M6-138	Lower and secure the 80' telescoping antenna.		X				
D-2-2	CDSC	M6-138	With concurrence of IN-OIS-2, turn power off to non-essential electronic equipment.			X			
D-2-3	A2A Vans		Verify completion of storage and tie-down of the A2A vans.			X			
D-2-4	Color Vans		Secure all exterior TV van cables, move color TV vans #1 & #2 to FCA Bldg High Bay area.		X				
D-2-5	Vehicles		Turn in all vehicles not required in support of hurricane preparation activities to GSA Pool.		X	X			
D-2-6	CDSC	M6-138	Coordination will be effected thru the communications control console (7-4141) for providing necessary communications support, and powering down of Video Systems not required for NASA operational activities.		X				
D-2-7	VABR	K6-1193	Secure equipment in building where damage may result from wind-driven rain. With concurrence of IN-OIS-2 power down all electrical equipment prior to power down of electrical utilities.			X			
D-2-8	Banana River Repeater	M7-531	1. With concurrence of IN-OIS-2, power down all electronic equipment prior to power down of electrical utilities. 2. Cover equipment inside building where damage may result from wind-driven rains.			X			
D-2-9	Press Site	K7-1205	With concurrence of IN-OIS-2, power down all electronic equipment.		X				
D-2-10	A&T Facility	M7-351	With concurrence of IN-OIS-2, power down all electronic equipment prior to power down of electrical utilities.		X				

Video Systems HURRICANE ACTION CHECKLIST

CTC-5051

ANNEX D-2

Page 2

GROUP CD&SC Operations

HURRICANE

Line Item	Facility/ Equipment	Bldg./No.	Action Required	Condition				Completion Name/Time	Notified Comm Control Name/Time
				4	3	2	1		
D-2-11	South Repeater	N6-1118	1. Secure equipment in building where damage may result from wind-driven rain. 2. With concurrence of IN-OIS-2, power down all electronic equipment prior to power down of electrical utilities.			X			
D-2-12	Tel IV	N6-2296	With concurrence of IN-OIS-2, power down all electronic equipment prior to power down of electrical utilities.			X			
D-2-13	NASA News Center	M7-657	With concurrence of IN-OIS-2, power down all electronic equipment prior to power down of electrical utilities.		X				
D-2-14			Personnel not required for rideout crew assignment will be released from duty upon authorization from supervision.				X		

Video Systems HURRICANE ACTION CHECKLIST

CTC-5051

ANNEX D-3

Page 1

GROUP Industrial Area Operations

HURRICANE

Line Item	Facility/ Equipment	Bldg./No.	Action Required	Condition				Completion Name/Time	Notified Comm Control Name/Time
				4	3	2	1		
D-3-1	Vehicles	M7-355	Turn in all vehicles not required in support of hurricane preparation activities to GSA Pool.		X	X			
D-3-2	O&C Building	M7-355	Coordination will be effected thru the communications control console (7-4141) for providing necessary communications support, and powering down of video systems not required for NASA operational activities.		X				
D-3-3	O&C Building	M7-355	With concurrence of IN-OIS-2, turn power off to all electronic equipment.			X			
D-3-4	Cryogenic Test Bldg 1 & 2	M7-1410 M7-1412	With concurrence of IN-OIS-2, turn power off to all electronic equipment.			X			
D-3-5	Spacecraft System Support Bldg. 1 & 2	M7-1210 M7-1212	With concurrence of IN-OIS-2, turn power off to all electronic equipment.			X			
D-3-6	Flight Crew Training Bldg	M7-409	With concurrence of IN-OIS-2, turn power off to all electronic equipment.			X			
D-3-7	CIF	M6-342	With concurrence of IN-OIS-2, turn power off to all electronic equipment prior to turn down of air conditioning to Room 161.			X			
D-3-8	CIF Ant Site	L7-1557	With concurrence of IN-OIS-2, turn power off to all electronic equipment.			X			
D-3-9	O&C Building	M7-355	Personnel will be released from duty upon authorization from Supervision.				X		

Video Systems HURRICANE ACTION CHECKLIST

CTC-5051

ANNEX D-4

Page 1

GROUP Operations Support

HURRICANE

Line Item	Facility/ Equipment	Bldg./No.	Action Required	Condition				Completion Name/Time	Notified Comm Control Name/Time
				4	3	2	1		
D-4-1	Vehicles	L5-683	Turn in all vehicles not required in support of hurricane preparation activities to GSA Pool.		X	X			
D-4-2	FCA Bldg.	L5-683	Verify storage of color TV, Vans 1 & 2 in High Pay garage area prior to garage door sealing by BCO.		X				
D-4-3	Personnel	L5-683	Standby for assistance to other Video Systems operations groups as may be requested.		X	X			
D-4-4	FCA Bldg.	L5-683	Personnel will be released from duty upon authorization from supervision...				X		

GROUP Communications Services

HURRICANE

Line Item	Facility/ Equipment	Bldg./No.	Action Required	Condition				Completion Name/Time	Notified Comm Control Name/Time
				4	3	2	1		
E-1-1	Communications Distrib. & Sw. Center	M6-138	Check area around building to insure that all items are properly secured or are removed for proper safekeeping.		X				
E-1-2	CD&SC	M6-138	Verify that Boeing has sealed and sandbagged all exterior doors except west main door.			X			
E-1-3	CD&SC	M6-138	Verify all vehicles not required for hurricane preparations are turned into storage area.		X				
E-1-4	CD&SC	M6-138	Verify that all vehicles used for hurricane preps are turned into storage area, and "Rideout" Tech Vehicle is parked at west door of building.			X			
E-1-5	Headquarters Building	M6-399	Verify KSC Communications Center is closed in accordance with FFC-CTC-5010 and area is secure.			X			
E-1-6	CD&SC	M6-138	Select qualified volunteers to man KSC Switchboard on "Rideout Crew" positions per para 4 c, Section 1, and pass names to Comm Control.			X			

Support Services HURRICANE ACTION CHECKLIST

GROUP Cable Engineering and Maintenance

HURRICANE

Line Item	Facility/ Equipment	Bldg./No.	Action Required	Condition				Completion Name/Time	Notified Comm Control Name/Time
				4	3	2	1		
E-2-1	KSC Cable Plant	KSC	Perform patrol of KSC Cable Plant in accordance with LOI 843-012 until released.	X	X				
E-2-2	LC-39 Pad A	Pad A	Check and secure doors and covers on all exposed TTC's and NR's and verify all exposed cables are secure.		X				
E-2-3	LC-39	Pad B	Check and secure doors and covers on all exposed TTC's and NR's and verify all exposed cables are secure.		X				
E-2-4	UCS SITES UCS 1	N6-2245	Check and secure doors, covers and caps on TTC's at the following listed Universal Camera Sites.		X				
	UCS 2	M7-286			X				
	UCS 3	K8-1648			X				
	UCS 4	H7-1986			X				
	UCS 5	H6-1629			X				
	UCS 7	J8-754			X				
	UCS 9	H7-163			X				
	UCS 10	F6-2325			X				
	UCS 11	G5-1011			X				
	UCS 12	J8-2228			X				
	UCS 13	H4-1725			X				
	UCS 14	J5-1241			X				

Support Services HURRICANE ACTION CHECKLIST

CTC-5051

ANNEX F-2

Page 2

GROUP Cable Engineering and Maintenance

HURRICANE

Line Item	Facility/ Equipment	Bldg./No.	Action Required	Condition				Completion Name/Time	Notified Comm Control Name/Time
				4	3	2	1		
E-2-5	UCS 15	K8-1403	Check and secure doors, covers and caps on TTC's at the following listed Weather Towers.		X				
	UCS 16	J6-393			X				
	UCS 17	J7-2162			X				
	UCS 18	K6-2498			X				
	Weather Towers								
	WT 1	L7-988			X				
	WT 2	M7-335			X				
	WT 5	M6-2274			X				
	WT 6	L6-75			X				
	WT 7	J7-2111			X				
	WT 8	J6-1869			X				
	WT 9	H4-1723			X				
	WT 10	H5-585			X				
E-2-6	WT 11	G5-961	Check and secure doors, covers and caps on TTC's at the following listed Tel Elsee Sites.		X				
	WT 12	G4-1318			X				
	500' Weather Tower	J6-490			X				
	Tel Elsee Sites								
	WT "E"	K6-1746			X				

GROUP Cable Engineering and Maintenance

HURRICANE

Line Item	Facility/ Equipment	Bldg./No.	Action Required	Condition				Completion Name/Time	Notified Comm Control Name/Time
				4	3	2	1		
E-2-6 (cont'd)	"C"	J7-2112			X				
E-2-7	"Temporary" MSS	L7-1445 K7-187	Check and secure doors on exposed TTC's/DB's on Mobile Service Structure and verify all exposed cables are secure.		X				
E-2-8	Line Trucks	M6-791	Secure/store all loose equipment on Line Trucks. Attach cable dollies and park one truck on each side of rodding machine; close windows, open the air vents, and leave in low gear with brakes set.			X			
E-2-9	Port. Generators	M6-791	Turn portable generators into Heavy Equipment Shop.			X			
E-2-10	Trailers 1-134 1-169, 1-143 & 1-192	M6-589	Tie down or remove all loose material, around trailer area, to the Dynamite shed for safekeeping.	X					
E-2-11	Trailer Occupants	M6-589	Verify trailers have been secured IAM para 1 b, Section 3.			X			
E-2-12	Cable Vehicles	M6-589	Verify all vehicles not required for hurricane preparations are turned into storage area.		X				
E-2-13	Cable Vehicles	M6-589	Verify all vehicles used for hurricane preps are turned into the storage area.			X			

Support Services HURRICANE ACTION CHECKLIST

CTC-5051

ANNEX E-3

Page 1

GROUP Telecommunications

HURRICANE

Line Item	Facility/ Equipment	Bldg./No.	Action Required	Condition					Completion Name/Time	Notified Comm Control Name/Time
				4	3	2	1			
E-3-1	Telcom Office Building	M6-589	Check area around building and Trailer 1-192 to insure that all loose objects are tied down or removed for safekeeping.	X						
E-3-2	Telcom Vehicles	M6-589	Verify all vehicles not required for hurricane preps are turned into storage area.		X					
E-3-3	Telcom Vehicle	M6-589	Verify all vehicles used for hurricane preps are turned into storage area.			X				
E-3-4	Pideout Crew Vehicles	M6-589	Verify that "Rideout Crew" vehicles are properly serviced, equipped with necessary supplies and radio operationally checked.			X				
E-3-5	Rideout Crew	M6-589	Select volunteers to man "Pideout Crew" positions at the CD&SC and Headquarters Bldg per para 4 c, Section 1, and pass names to Comm Control.			X				
E-3-6	Telcom Office Building	M6-589	Verify that Boeing has sealed and sandhagged all doors and all preparations are completed.			X				
E-3-7	Hurricane Control Center	M6-399 Room 2110	Verify all point-to-point phones, per para 2 b, Section 2 are operational.	X						

Detent Support HURRICANE ACTION CHECKLIST

CIC-5051

ANNEX F

Page 1

GROUP Shops and Supply

HURRICANE

Line Item	Facility/ Equipment	Bldg./No.	Action Required	Condition				Completion Name/Time	Notified Comm Control Name/Time
				4	3	2	1		
F-1	Communications Maint & Storage Building	M6-791	Call in all Radio Net 108 Porta-Mobile units and perform operational check to verify operational. Inoperative units will be repaired and all units will be held for possible issue as directed by IN-OIS.	X					
F-2	CM&SB	M6-791	A Radio Net 108 Porta-Mobile unit will be checked out from Supply, delivered to the home of the KSC Director, and operational check performed to the KSC Hurricane Center. Verify completion.		X				
F-3	CM&SB	M6-791	Police area around building, and remove or secure all loose items. Move trash cans inside building.		X				
F-4	CM&SB	M6-791	Move equipment, files, desks, supplies away from windows/doors where damage could be caused by wind driven rain.		X				
F-5	CM&SB	M6-791	Verify all vehicles not required for hurricane preps be turned into the storage area.		X				
F-6	CM&SB	M6-791	Verify all vehicles used for hurricane preps are turned into the storage area.			X			
F-7	CM&SB	M6-791	Verify that Boeing has sealed and sandbagged all doors and building is secure.			X			

Communications Office Bldg. HURRICANE ACTION CHECKLIST

CTC-5051

ANNEX G

Page 1

GROUP COP Administration

HURRICANE

Line Item	Facility/ Equipment	Bldg./No.	Action Required	Condition				Completion Name/Time	Notified Comm Control Name/Time
				4	3	2	1		
G-1	Communications Office Bldg.	M6-339	Move documents/files away from windows where water damage is possible if windows break.		X				
G-2	Vehicles	M6-339	Deliver all vehicles to the GSA Motor Pool for hurricane storage per para 1 d, Section 3.		X				

Systems Support HURRICANE ACTION CHECKLIST

CTC-5051

ANNEX H

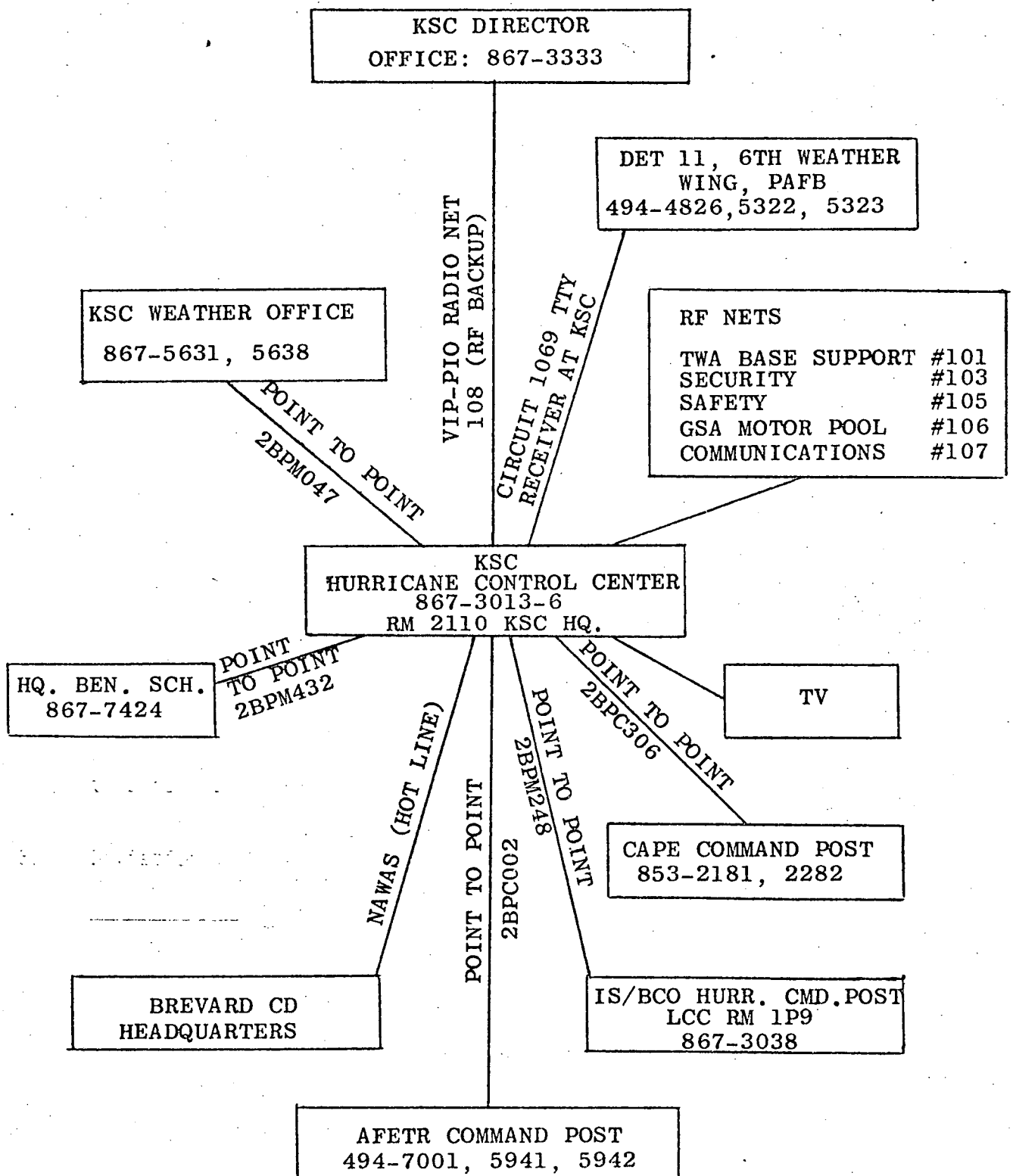
Page 1

GROUP Test Support

HURRICANE

Line Item	Facility/ Equipment	Bldg./No.	Action Required	Condition				Completion Name/Time	Notified Comm Control Name/Time
				4	3	2	1		
H-1	N/A	N/A	Originate Status Notification List (Annex A) for each change in hurricane condition and notify all Branches to proceed with applicable tasks.	X	X	X	X		
H-2	Point-to-Point Phones	M6-399	Request Cape Comm Control establish Point-to-Point circuits 2BPC002/5GP0785 and 2BPC306/2GP0850 for the duration of the hurricane watch.	X					
H-3	Point-to-Point Phones	M6-399	Request JMTB accomplish line item E-3-7 and verify phones operational.	X					
H-4	Radio Net 108 (Call In)	M6-791	Request Radio Shops/Supply accomplish line item F-1 and verify completion.	X					
H-5	Radio Net 108 (Installation)	Dr. Debus Residence	Request Radio Shop accomplish line item F-2 and verify completion.		X				
H-6	Vehicle	M6-138	Turn section vehicle into hurricane storage area.		X				
H-7	Rideout Crew	M6-138	Select volunteers to man "Rideout Crew" positions at FEC Comm Control, Room 133, CD&SC per para 4 c, Section 1.			X			
H-8	Rideout Crew	M6-138 and M6-399 Rm 2110	Inform KSC Hurricane Control Center the name and location of all FEC Comm personnel on "Rideout Crew" positions.			X			

HURRICANE COMMUNICATIONS DIAGRAM



AUTHORIZATION FOR PROCEDURE DEVIATION/REVISION

TITLE: HURRICANE PREPAREDNESS AND CONTROL PLAN

PROCEDURE NO: FEC-CTC-5051

1. This form shall be used to record any deviation from the subject procedure. Each deviation recorded shall reference the specific procedure section, page, and paragraph number, and shall present the reason for, and details of, the deviation. Each deviation shall also be followed by one of the following symbols.

OT One time deviation; revision of the procedure is not required.

PD Permanent deviation; revision of the procedure is required.

2. After the subject procedure has been completed and all deviations recorded, appropriate signatures shall be entered in the spaces provided. When all signatures have been obtained, the system engineer shall be responsible for forwarding this form to the appropriate procedures group for revision, if required. In all cases a copy of this form shall be placed in the site Test Folder as a record.

3. Deviations:

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There is no handwriting or printed text on the paper.

Date _____

Date _____

Date _____

Date _____

DISTRIBUTION LIST.

FEC-CTC-5051

<u>MAIL CODES</u>	<u>BLDG</u>	<u>NAME</u>	<u>NO OF COPIES</u>
IN OIS	COB	R. Browne.....	1
IN OIS 1	COB	A. Parrish.....	1
IN OIS 1A	LCC 1R13	J. Davenport.....	1
IN OIS 1B	M7-355	M. Clayton.....	1
IN OIS 2	COB	C. Wright.....	1
IN OIS 3	M6-138	G. Robinson.....	1
IN QAL	EML	J. Fike.....	1
IS DOC 1L	KSC HDQ	KSC Library.....	2
FEC 131	CIF	J. Cheney.....	1
FEC 160	VAB 30B8	J. Gotch.....	1
FEC 220	EML	J. Everett.....	8
FEC 810	COB	FEC Technical Library.....	2
FEC 810	COB	D. Boessow.....	9
FEC 820	COB	R. Tveter.....	5
FEC 830	M6-791	R. Mears.....	8
FEC 840	M6-138	D. Martin.....	4
FEC 870	M6-138	W. Deeter.....	4
FEC 870	M6-138	Procedures Section.....	4

Total Copies 55

Original and extra copies to: R. L. Adams, Sr.
FEC 870
M6-138
867-2151